

NPFC-2023-SSC BFME04-IP06



Report of Japanese sea-floor visual survey in the northern Emperor Seamount in 2023

Conducted from June 27 to July 21 in 2023

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**Fisheries Resources Institute

Objective & Methods

Objective is...

To collect information on distribution of cold-water corals and other communities on Seamounts of the northern fishing area in the Emperor Seamounts region

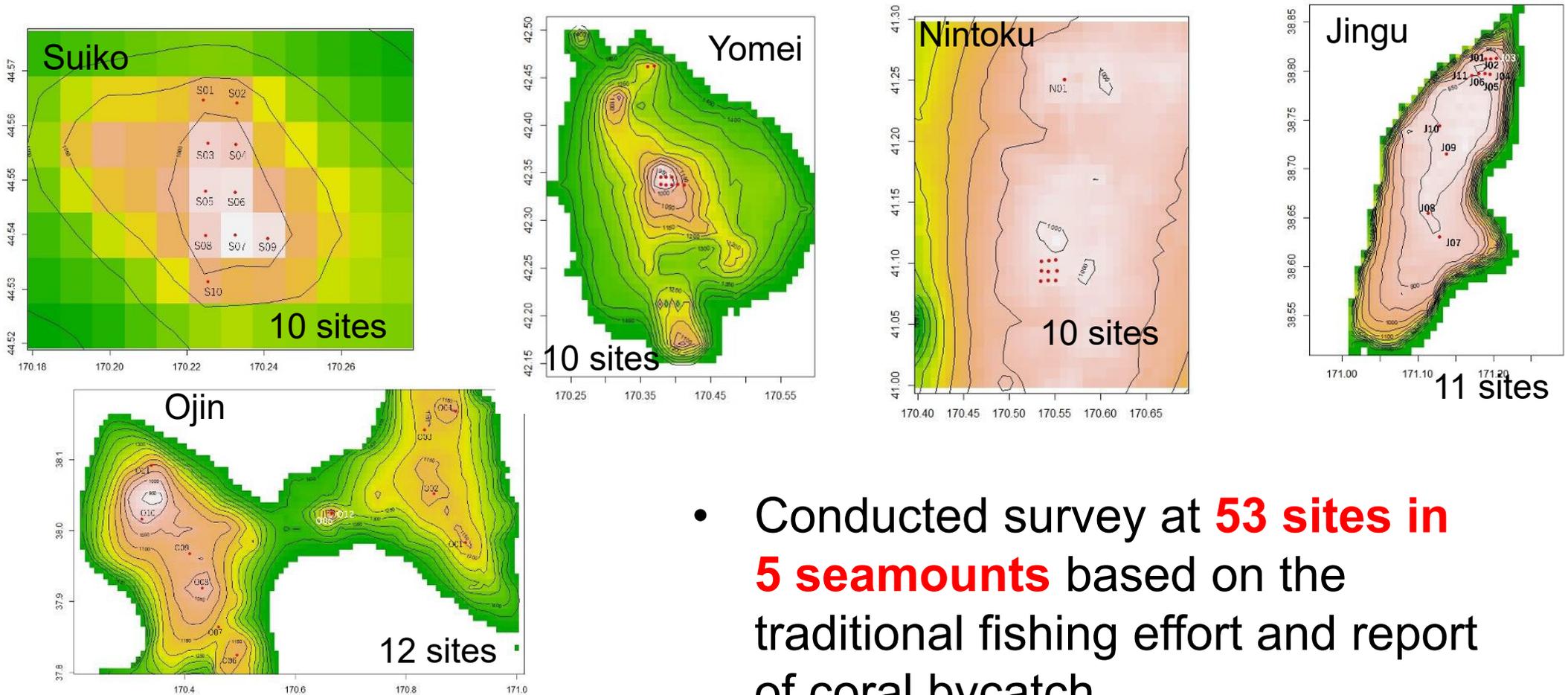
Drop camera system

- GoPro digital camera used as video camera and LED light
- Lowered down on the sea-floor five times to take sea-floor images on five neighboring locations in each site
- Kept on the sea-floor for 2 min each touchdown



Target seamounts

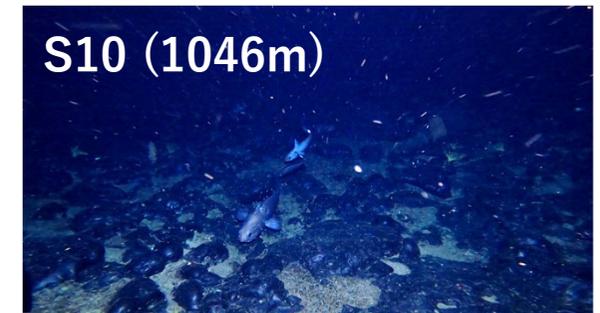
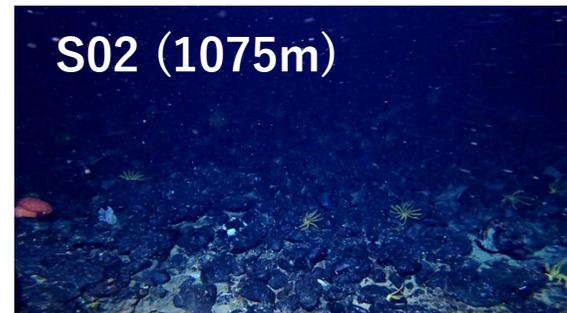
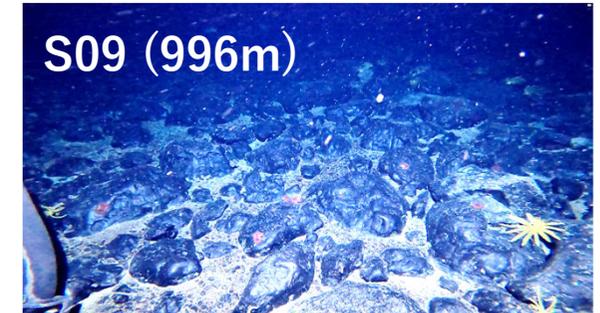
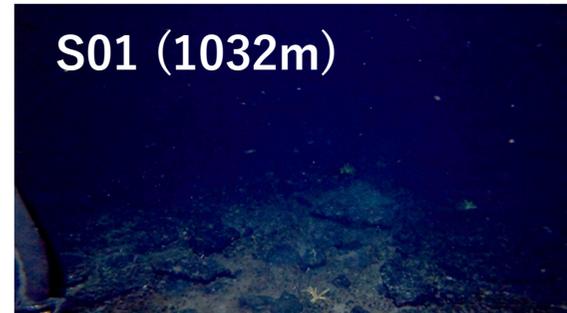
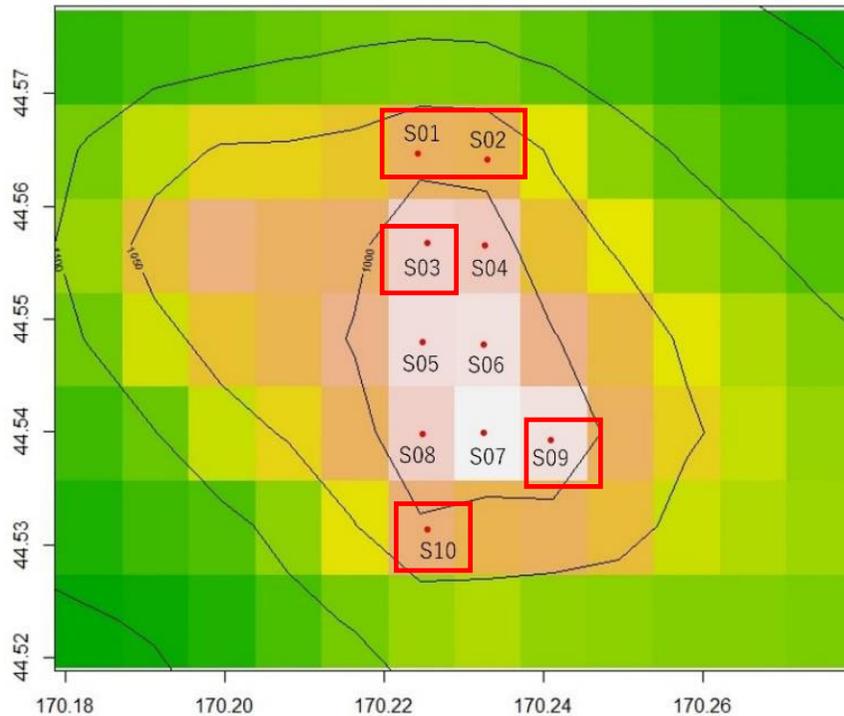
Suiko, Yomei, Nintoku, Jingu and Ojin Seamounts



- Conducted survey at **53 sites in 5 seamounts** based on the traditional fishing effort and report of coral bycatch

Results -Suiko Seamount (1)-

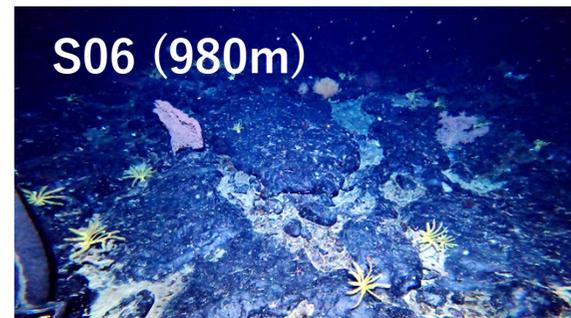
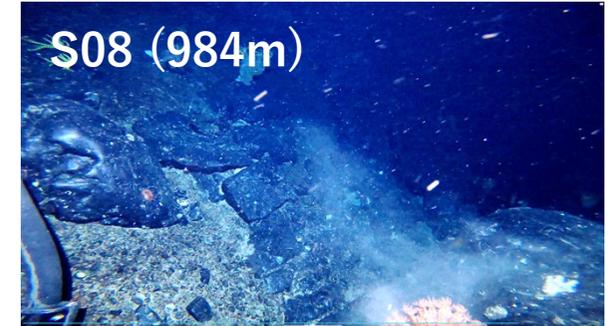
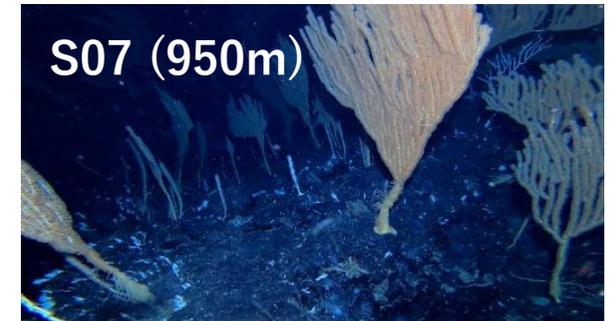
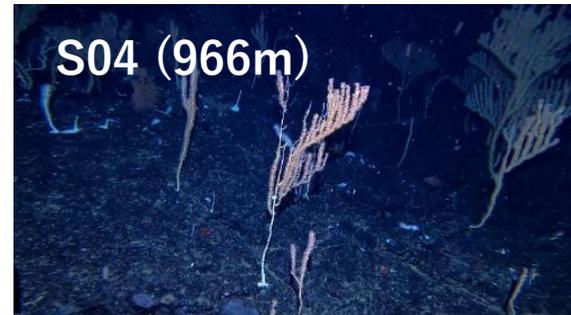
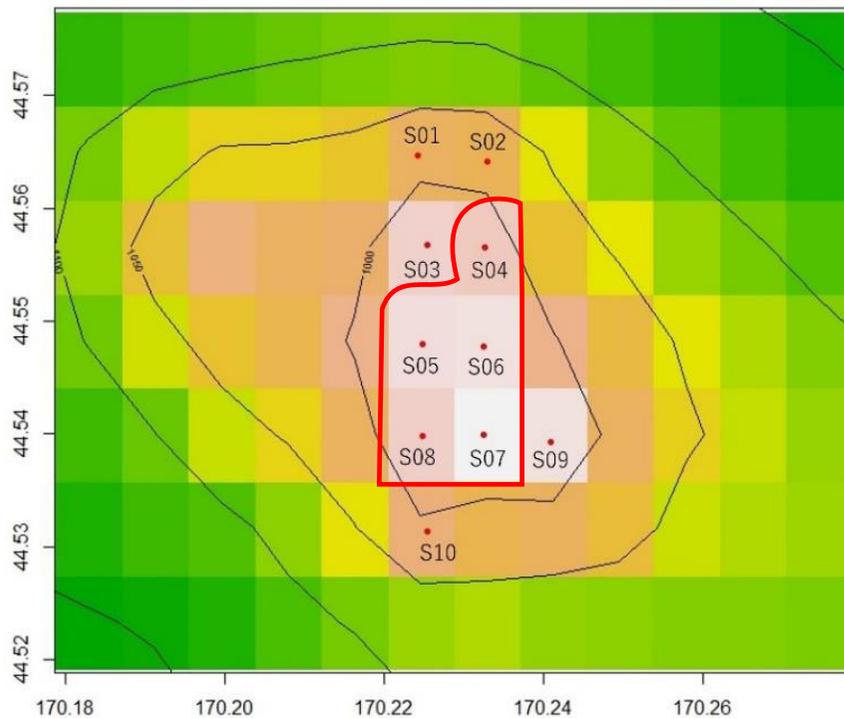
Corals and other benthos are sparsely (S01, S02, S03, S09, S10)



- **Low priority sites** as VME indicators survey

Results -Suiko Seamount (2)-

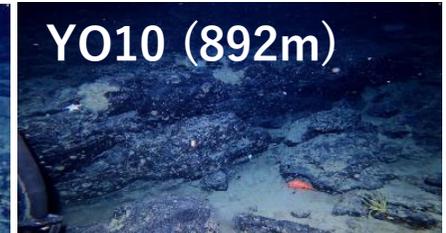
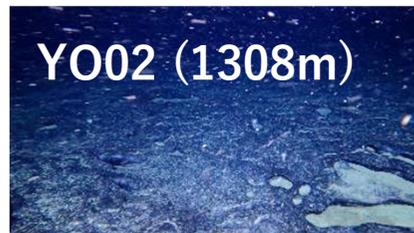
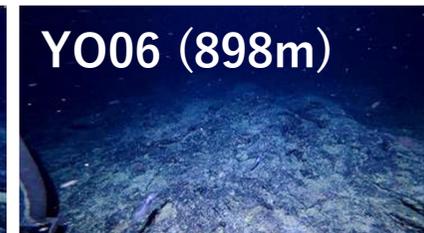
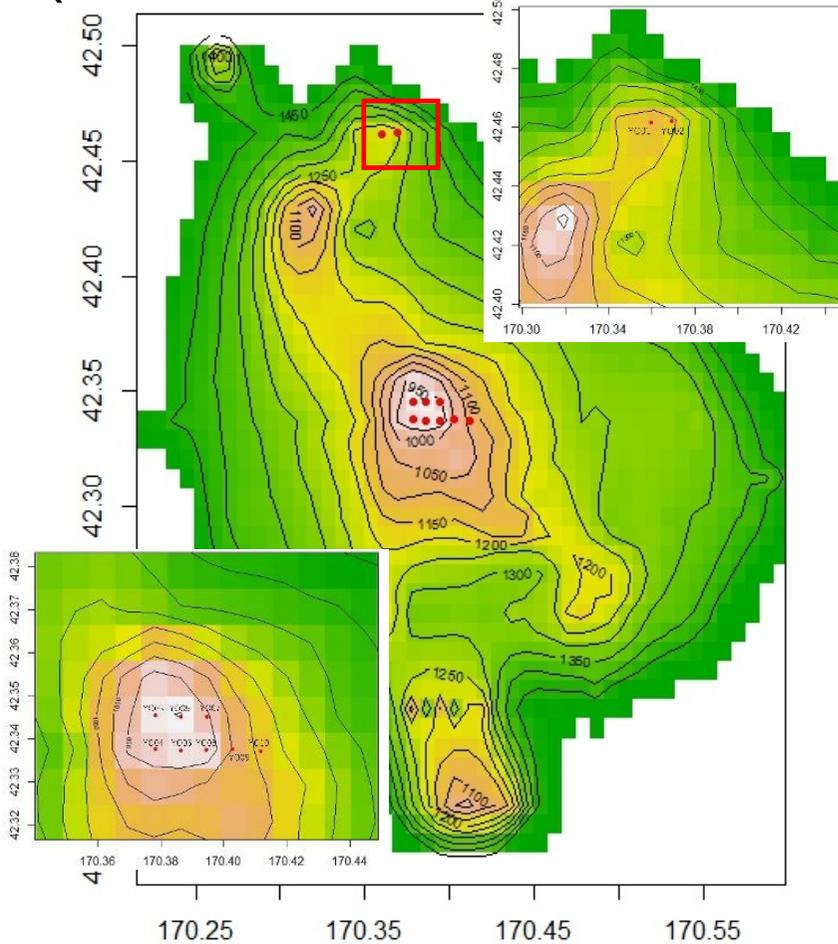
Several species corals mainly large gorgonians (S04, S05, S06, S07, S08)



- Further survey the westward extent of this coral community

Results -Yomei Seamount (1)-

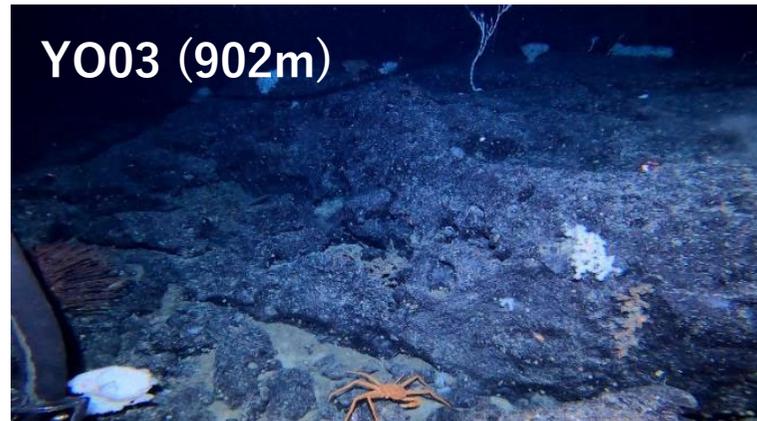
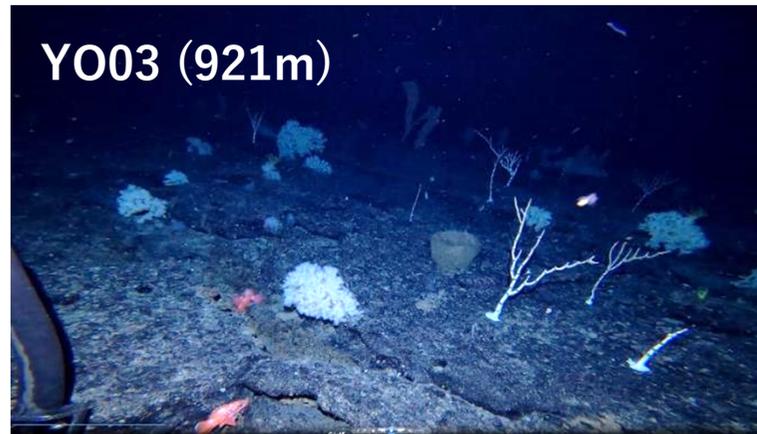
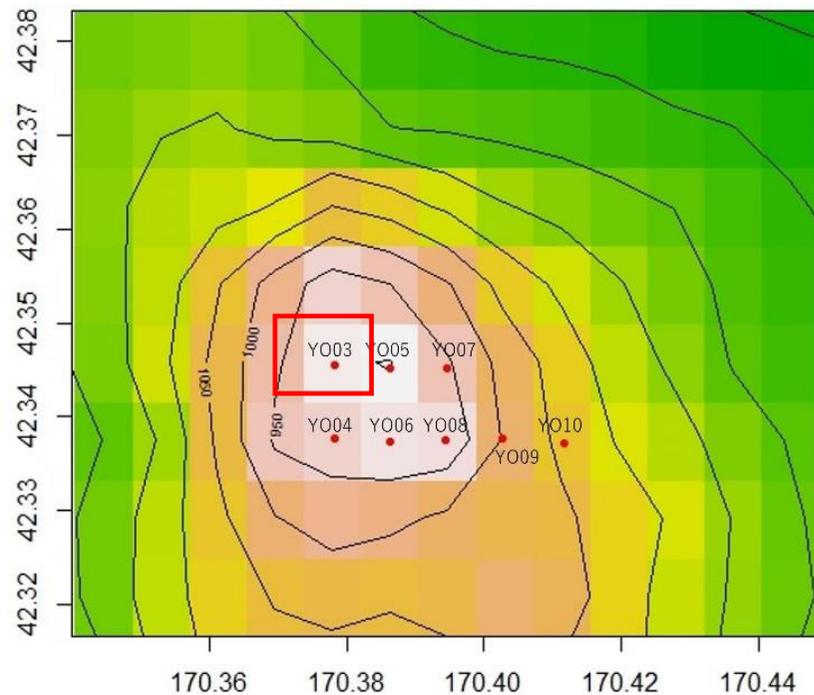
Sites with few corals and other benthos
(YO01, YO02, YO04, YO05, YO06, YO07, YO08, YO09, YO10)



- **Low priority sites** as VME indicators survey

Results -Yomei Seamount (2)-

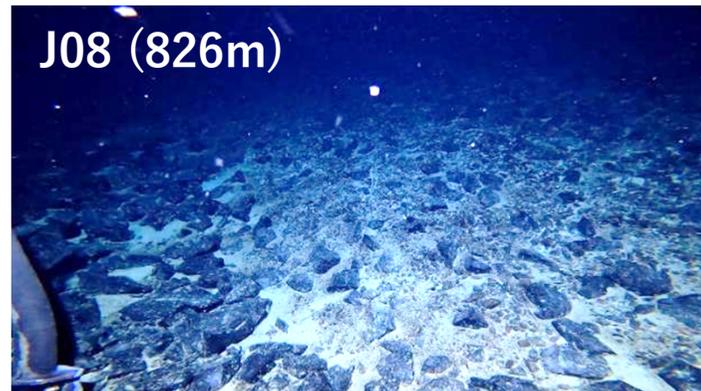
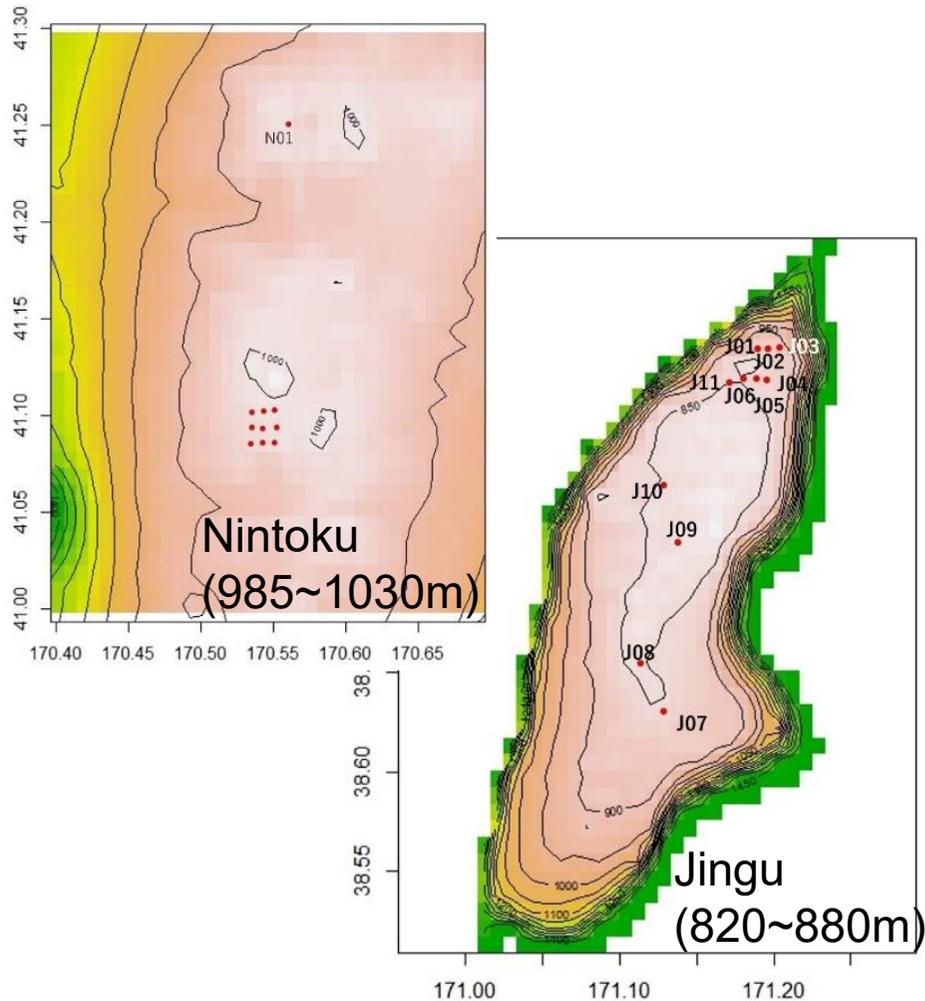
Site with large gorgonians and glass sponge (YO03)



- Need to clarify the surrounding of Y03 in detail

Results –Nintoku and Jingu Seamounts-

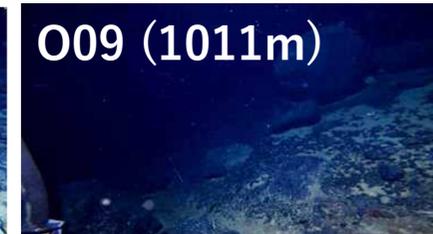
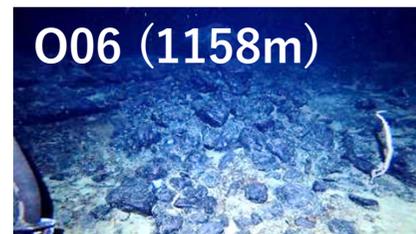
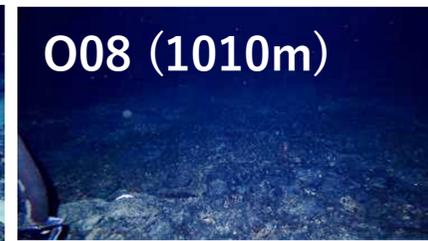
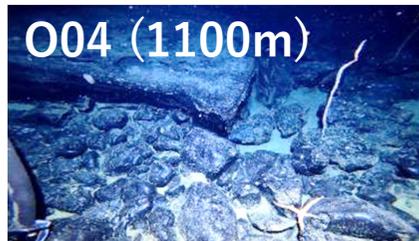
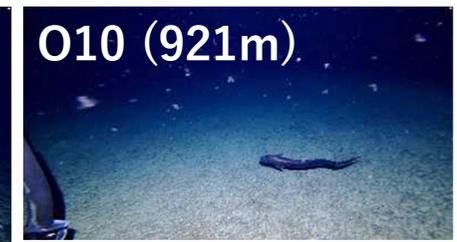
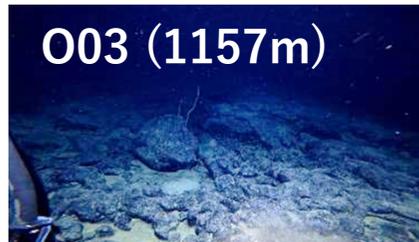
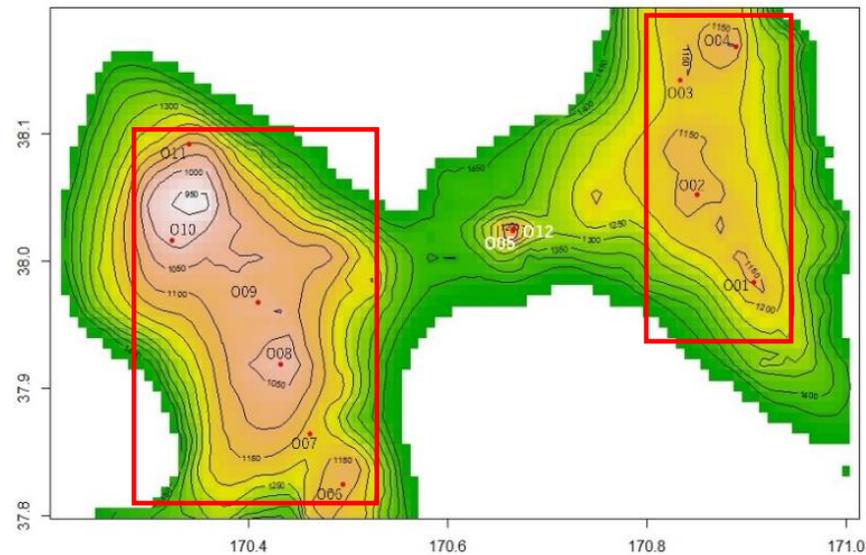
Little or no benthic animals observed



- Low priority seamounts as VME indicators survey

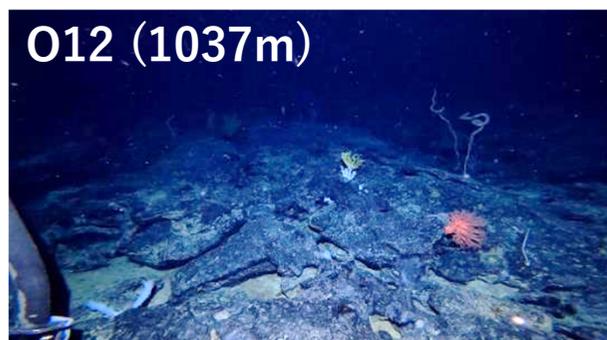
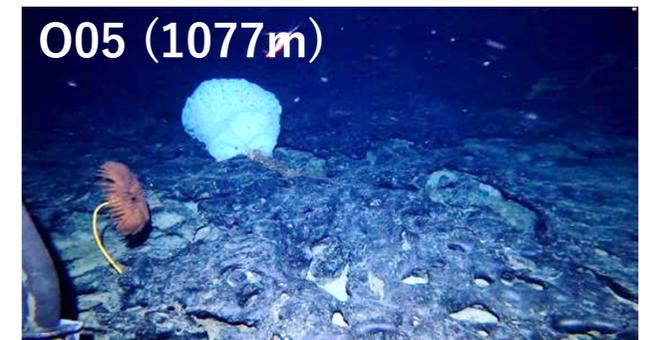
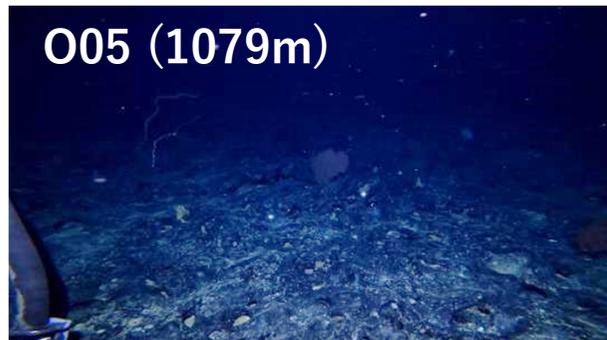
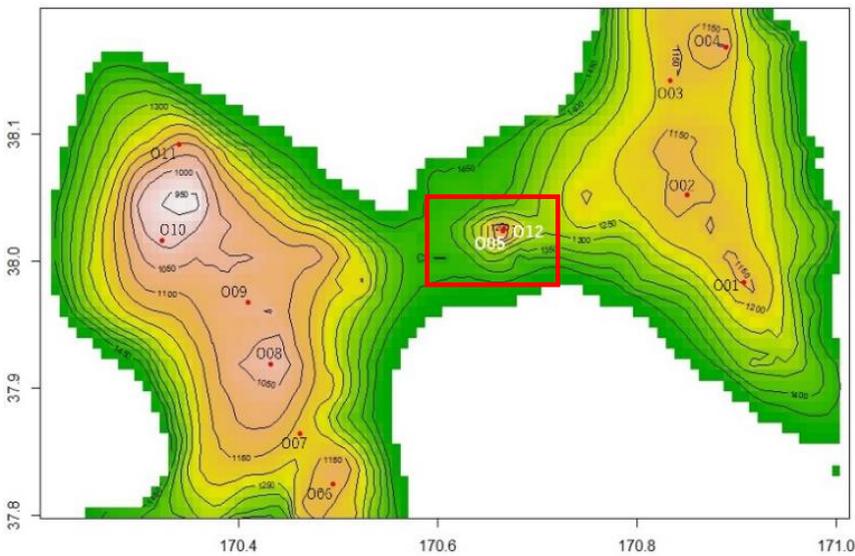
Results -Ojin Seamount (1)-

Sites with few corals and other benthos
(O01, O02, O03, O04, O06, O07, O08, O09, O10, O11)



- **Low priority sites** as VME indicators survey

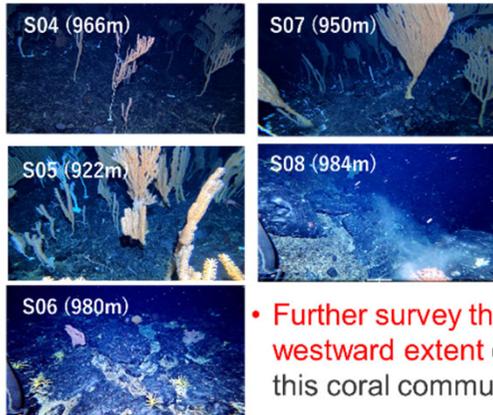
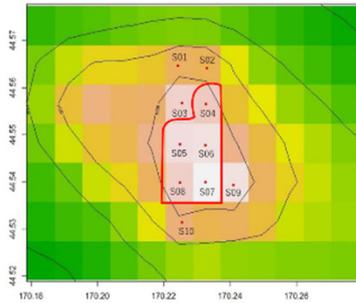
Assemblage of gorgonians, sea lilies and massive sponges dominated by uniaxial Isididae (O01, O02)



- Need to **check the extent** of this community

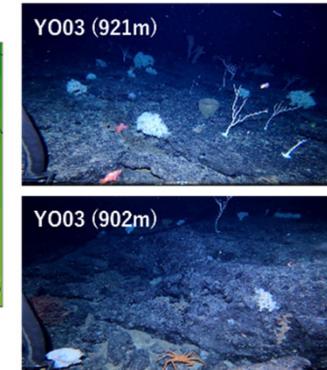
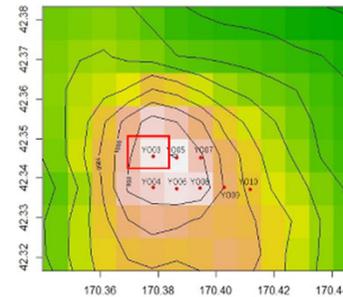
Future works

Several species corals mainly large gorgonians (S04, S05, S06, S07, S08)



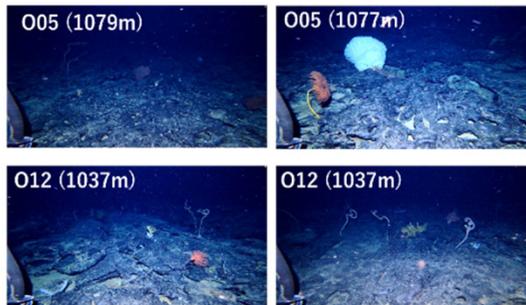
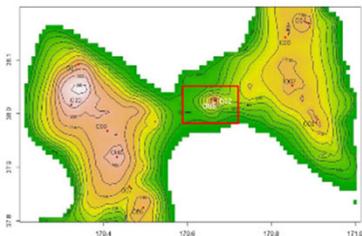
• Further survey the westward extent of this coral community

Large gorgonians and glass sponge sites (Y003)



• Need to Clarify the surroundings of Y03 in detail

Assemblage of gorgonians, sea lilies and massive sponges dominated by uniaxial Isididae (O01, O02)



• Need to check the extent of this community

- Confirm the extent of the observed communities
- Determine whether or not it is a VME using VME identification method.